SOCIODEMOGRAPHIC ASPECTS OF DEPRESSIVE SYMPTOMATALOG: CROSS CULTURAL COMPARISONS

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by

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Reda M. Ibrahim

Preface

Although the study of demographic and sociocultural factors of depression has been only partially of interest to psychopathologists for a long time, our review of more recent literature shows a renewal of interest among them for further studies in this area. With emphasis on cultural comparisons this research is planned to:

1. Provide empirical data regarding the prevalence of depressive symptoms among a sample of college students in Saudi Arabia,

2. Determine the similarities and differences between this Arabic culture, and the Americans in terms of expressing depression specific symptoms, and to

3. Examine the type of relationships between depression and certain sociodemographic and ecological factors.

Some introductory words about the plan of this thesis may be in order. In chapter I we will consider some basic terms related to defining depression and some of the major theories accounting for depression. We emphasize those theories which are related to our purpose of designing this research, particularly those related to designing the tools, and those

related to the discussion of the social aspects of depression. Within the framework developed in chapter 1, some recent literature related to the sociodemographic variables of depression will be reviewed in chapter 2. Chapter 3 is a methodology chapter, and as such it discusses our goals, objectives, psychometric tools, and procedures of our study including sampling, and methods of statistical analyses. The results of our study will be displayed in chapter 4, and discussed in chapter.

SOCIODEMOGRAPHIC ASPECTS OF DEPRESSIVE SYMPTOMATOLOGY: CROSS CULTURAL COMPARISONS

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Abstract

Sociodemographic Aspects of Depressive Symptomatology: Cross Cultural Comparisons

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This research investigated depression symptoms rates in a group of Saudi Arabian students, examined the relationship between depression and socioeconomic status, and compared depression scores in Saudi Arabia with obtainable rates in U.S.A. The Ss consisted of 250 male heterogeneous group of university undergraduate students living in the King Saud University dorms.

All Ss were administered the Depression Symptomatology Scale which consists of 18 depression items used widely in research on depression symptomatology in the West. Also, the Ss were asked to answer items about major sociological, demographical, and biographical aspects including age, marital status, educational level, citizenship, income, parents income, years of education for parents, and so forth.

A Pearson Correlation Matrix (10 variables was developed to

correlate the following variables: depression (total score), age marital status, citizenship, residency (city or country), own income, father's income, father's education, mother's income, and mother's education. Additionally, a number of one-way analyses of variance procedures (Simple Randomized Design) were performed. Significance of the effects of each independent sociodemographic variable on the dependent variable of depression was tested. Analyses of variance were also used to examine the effects of depression levels on the sociodemographic variables.

More Saudi Ss have reported depressive symptoms related to two major depression dimensions: first, the negative self-evaluation dimension which consists of items indicating blaming self, low spirits, and the feeling that things didn't turn out as expected. The second dimension relates to physical distress and somatic symptoms. The Saudis reported much higher depression variables than the Americans in almost all items. All the depression items correlated well above the average with the total score. Depression score was quite independent from the sociodemographic variables used in this study. The social variables that showed some significant patterns of correlations with depression variables were: father's years of education, personal income, and age.

CHAPTER ONE

Depression: Definition and Theories

Introduction

Depression is one of the most widespread emotional problems, and the most common psychiatric disorder for which people seek help in office practice and outpatient clinics. Depression is a worldwide problem, recognized in all cultures. Statistics show that from 10% to 20% of all Americans will suffer from an affective disorder at some time during their lives. Epidemiologists currently estimate that unipolar illness, (only depressive episodes) is about twice as common in women as in men (Hamilton, 1989; Kupfer & Frank, 1981). The study of depression is important, not only because of the human misery it causes, but because its by-product, suicide, is a leading cause of death in certain age groups (Beck, Brady, & Quen, 1977). Controversy still persists regarding the relationship between depression and other demographic variables such as age, socioeconomic status, race, and so forth. We shall discuss such relationships in a later section.

It should be stressed, also, that depression does not occur

soley in isolation from other psychiatric or medical problems, but it contributes to other psychiatric and health problems. Recent research (e.g., Hamilton, 1989) shows that anxiety, for example, is present in almost 77% of depressed psychiatric patients. It also contributes to problems of alcoholism, drug dependency, libido, and somatic complaints (Hamilton, 1989; Kupfer & Frank, 1981). Obviously, depression is a significant subject for research.

Definition:

Depression was described, in the past century, under the label of melancholia. At the beginning of the 19th century, the symptoms of depression were described as "taciturnity, a thoughtful pensive air, gloomy suspicions, and a love of solitude," (Pinel, 1962).

An individual who describes his mood as "depressed" may be referring to normal sadness. On the surface, pathological depression may appear to be an intense, exaggerated form of sadness accompanied by anorexia, insomnia, fatigue, and other symptoms. While depression is regarded by some authorities as a discrete disease entity based on biological disorder (Kraines, 1957), others believe that depression and sadness are two extremes on a continuum of mood reactions (Meyer, 1951).

Recently, diagnostic criteria for depression have been

established in the Diagnostic and Statistical Manual (American Psychiatric Association, 1987). According to the DSM-III, depressive episode is characterized by a dysphoric mood and loss of interest and pleasure in all, or almost all, usual activities. Investigations of depression symptomatology add other symptoms summarized by Kupfer and Frank (1981) as follows:

1. Inability to experience pleasure.
2. Change in appetite, usually a decrease accompanied by weight loss.
3. Change in sleep pattern.
4. Loss of energy: fatigue and lethargy.
5. Increased motor activity experienced as restlessness (agitation).
6. Retardation of speech, thought, and movement.
7. Decrease in sexual interest and activity.
8. Loss of interest in work and usual activities.
9. Feelings of worthlessness, self-reproach, guilt, and shame.
10. Diminished ability to think or concentrate.
11. Lowered self-esteem.
12. Feelings of helplessness.
13. Thoughts of death and/or suicide plans or suicide attempts.

14. Anxiety.
15. Bodily complaints such as headache, stomach ache, dry mouth, constipation.

The key factor in diagnosing depression is change in the psychobiological systems, changes involving emotion, motivation, cognition, physiology, and behavior.

Theories of Depression

Psychoanalytic Theories of Depression:

The early psychoanalytic view of depression was primarily of the interaction between drives and affects, such as feelings of loss and guilt. Abraham (1960) postulated that the depressive's capacity for affection is undermined by feelings of hatred and hostility brought about by unsatisfied sexual desires. Unable to love, the depressive's hostility is turned inward by means of reverse projection, i.e., "I am hated because of my defects." He tends to be irritable, seeks revenge, and feels intense guilt.

In light of Freud's concept of the psychosexual stages of development, and according to Abraham (1960), the depressive's development is fixed at the oral stage, due to an inherited predisposition to oral eroticism and childhood disappointments in love. In his comparison of manicdepressive

psychosis and obsessional neuroses. Abraham noted that the obsessional tries to retain his loved object while the melancholic expels the object which has disappointed him. The depressive may then try to repossess the lost object orally and sadistically punishes it within himself.

The roots of depression according to psychoanalysts (e.g., Melanie Klien, 1948) are in the mother-child relationship in the first year of life. The weak ego of the deprived infant is susceptible to sadness, helplessness, and frustration ("the depressive position"), and there is a failure to build up a strong self-concept independent of the mother's affection. Klien also depicted the dependent infant's unconscious fantasies of sadism.

Other psychoanalytic thinkers concentrate on the ego stages. According to Bibring (1953) for example, the disorder is the "emotional correlate of a partial or complete collapse of the self-esteem of the ego, since it feels unable to live up to its aspirations while they are strongly maintained." The three major areas of aspiration are the wish to be loved and valued, the desire to be strong and secure, and the wish to be loving and good.

Edith Jacobson's ideas (Jacobson, 1954, 1953) are an outgrowth of Bibring's ego-centered views, with loss of self-esteem as the central feature of depression. She stated that

self-esteem represents the degree of discrepancy between "ego-ideal" and "self-representation." In an attempt to delineate the nature of ego regression in depression, Jacobson theorized that early disappointment and its concomitant self-reproach occur in the early life of a depressive.

Relevant criticisms have been directed at some of the psychoanalytic theories described above. For example, psychoanalysts have been condemned because rather than using data to arrive at a theory, they have been prone to interpret data to support the a priori theory. Mendelson (1960), has pointed to psychoanalysts' tendency to incorporate all psychological behavior into a single vast formula, thus overly simplifying a complicated problem. The formula is often derived from insufficient data, and the emphasis on very early childhood events is a shortcoming. Not enough attention is paid to events in later life, and empirical validation is scanty.

Parental Deprivation and Depression:

Parent-child separation does not appear to be a significant factor in endogenous depression. Gay and Tonge (1967) reported that parental loss is more frequent in psychogenic than in endogenous depression. No comparison was made with normal controls. Hill and Price (1976) compared depressives with other psychiatric patients; they reported no excess of

maternal loss, but a significant excess in paternal loss.

These positive findings seem impressive, but there have been studies which failed to establish any significant relationship between separation and depression. Pitts et al. (1965) found no significant association between psychiatric illness and childhood bereavement. It would be necessary, in these cases, to control for the presence of depression in nonpsychiatric groups.

Behavioral Theories of Depression:

Lazarus (1968, 1971) proposed that depressions which could not be explained by learning theory principles are probably organic in nature. He viewed depression as a function of inadequate or insufficient reinforcers. Thus, therapy should help the depressive to take advantage of all available reinforcers or provide a change in the reinforcement schedule.

More recently and based on the same learning principles, Seligman (1975, 1988) proposed the concept of **learned helplessness** to account for depression. We will discuss this concept and its implication in understanding depression separately.

Personal characteristics, such as a lack of social skills, or environmental factors may cause the low rate of positive reinforcement. Lewinsohn, Shaffer, & Libet (1969) tried to test

the hypothesis that depressed individuals are lacking in social skills. The authors reported that depressed individuals interact with fewer people than do nondepressed individuals; depressives also emit shorter messages which are often timed inappropriately. A therapeutic approach was designed by these researchers to positively reinforce constructive behaviors and social skills, while negatively reinforcing depressive behaviors.

The behavior theorists have been criticized for their neglect of the subjective components of depression, such as sadness, hopelessness, and suicidal wishes. In addition, much of the data used to substantiate various behavioral concepts has been contradictory. In general, behavior theory has been applied only to limited aspects of the phenomenon of depression.

Cognitive Theories of Depression:

Cognitively, depression may be viewed in terms of the three major cognitive patterns that revolve around the themes of loss and deprivation.

The first pattern is the negative view of self: deprived, defective, or defeated. The depressed individual regards himself as lacking in gratification, inadequate, or worthless. He believes that he is undesirable and rejects himself because of his alleged defects. Secondly, the depressed tends to interpret all

of his experiences and interactions with his environment negatively as representative of deprivation and defeat. Finally, a negative view of the future permeates his ideation. As he looks ahead, the patient sees an indefinite continuation of his present difficulties and a life of unremitting deprivation, frustration, and hardship.

According to Beck who pioneered the cognitive approach to depression, the motivational changes in depression (paralysis of the will, suicidal wishes, increased dependency, escapism and avoidance wishes) are also related to cognition. "Paralysis of the will" may be considered a result of the patient's pessimism and hopelessness; since he expects a negative outcome, he is reluctant to commit himself to a goal or undertaking. Conversely, when he is persuaded that he can succeed at a particular task, he may be stimulated to pursue it (Beck, 1974, 1976).

The concepts that predispose an individual to depression have been delineated. Early in life, a child develops many attitudes about himself and his surroundings. Some of these concepts are realistic and facilitate healthy adjustment, while others deviate from reality and make the individual vulnerable to possible psychological disorders.

The vulnerability of the depression-prone individual is a result of these enduring negative concepts. Although the

schemas may be latent at a given time, they are activated by particular kinds of circumstances and consequently may lead to a full-blown depression. Situations reminiscent of the experience responsible for embedding a negative attitude may trigger a depression. For instance, distruption of an irreversible loss that followed death of a parent in childhood.

Learned Helplessness Theory of Depression:

Depression is one of the most widespread emotional problems, and it is undoubtedly has many causes. The major factor, however, is described by Seligman (1975) as learned helplessness. Learned helplessness explains to us what would happen if a person appraised a threatening situation as hopeless.

Learned helplessness has been demonstrated in the lab with animals tested in a shuttle box. If placed in one side of a divided box, dogs will quickly learn to leap to the other side of the box to escape an electric shock. If they are given a warning before the shock occurs, most dogs will learn to avoid the shock by leaping the barrier before the shock arrives. This is true of most dogs, but not those who have learned to feel helpless. The dogs were made helpless by placing them in harnesses from which they could not escape during application of several painful electric shocks. When placed in the shuttle box, those

dogs reacted to the first shock by crouching, howling, and whining. None tried to escape. They helplessly resigned themselves to their fate. They had already learned that there was nothing they could do about the shock.

Seligman (1975) stated that this is the case with depressed humans, too. He described a similar reaction in Vietnam prisoner of war camps. Seligman reported the case of a young marine who had adapted unusually well to the stresses of being a prisoner of war. His health was apparently related to a promise made by his captors that if he would cooperate he would be released on a certain date. As the date approached, his spirits soared. Then came a severe blow. He had been deceived. There was never any intention to release him. He immediately lapsed into a deep depression, refused to eat or drink, and died shortly thereafter. The deception was not an electric shock, but certainly psychologically fatal.

Seligman's research, however, gave some clues about how to unlearn and cure learned helplessness. With dogs the cure was creating HOPE, by forcibly dragging them away from the shock into the safe compartment. After this is done several times, the animals regained hope and feelings of being able to positively control the situation.

Conclusion:

Social psychiatric research and the study of sociodemographic variables in depression will both benefit and shed more light on the underlying theoretical mechanisms of depression with special emphasis on social and cultural variables. In the next chapter, we will review such research which generally shows that social stress relating to disadvantaged social or demographic variables can lead to depression. Thus, bad social experiences, continuous social stresses due to social deprivation, poverty, lower economic status, divorce and separation, being a member of a disadvantaged group such as being "too old" or "too young," all can be taken as leading to lack of control and consequently depression. Our study of the relationships between depression symptoms and certain social and demographic variables in a non-Western culture such as Saudi Arabia, which we will explain further in next chapters, will be guided by all of the above interpretations of depression as they related to social processes.

CHAPTER TWO

Sociodemographic Aspects of Depression

Review of Literature

Ray (1983) noted that although the study of demographic variables and depression has been considered for a time a rather suspect field of research, it appears that such a study seems to be making something of a comeback among psychologists. In the following section a review of such studies will be done.

Most of the research done in the United States and Western cultures about the relationship between depression and sociodemographic factors was about variables such as sex, age, social class, marital status, and ethnic background.

An additional set of relationships which relates to this area concerns the relationship between depression and the so-called stressful life events dimensions which are assumed to arise from certain events related to socioeconomic factors (e.g., decreased income, divorce, aging, etc.). All these aspects will be reviewed in this coming section.

Sex Differences:

Most studies have shown that depression is approximately twice as frequent in females than in males. Schwab, Brown, and Holzer (1968) have revealed that the peak years for women with reactive depression are earlier than those for men and occur prior to menopause. In terms of endogenous depression, Watts (1964) found the peak age for women to be concurrent with menopause, while in men it appears much later.

In a study with medical inpatients, it was found that slightly more females are depressed and that definite sex-related profiles of depression emerge (Schwab et al., 1968). Findings indicated that females tend to somatize, while males refer more often to feelings of personal despair.

One major line of research on sex differences in depression can be singled out based on role related stresses. For the past decade, the dominant perspective has held that women are disadvantaged relative to men because their roles expose them to more chronic stress (Gove, 1979). The hypothesis that sex differences in depression are attributable to traditional differential sex roles in Western society has stimulated much research (e.g., Baron & Matsuyama, 1988; Gove, 1979). Consistent with this notion, differences in depression, as indicated by a variety of measures, are often observed to be smaller, or even reversed, for groups whose sex

roles are more nearly alike (Baron & Matsuyama, 1988; Meddin, 1986).

Empirical analyses to measure stress have used indirect assessments based on measures of objectively defined role characteristics or constellation of multiple roles to document this relationship. For example, Gove (1979) demonstrated that the relationship between sex and first admission to psychiatric hospitals was stronger in the married than the never married or previously married. Based on this observation, he argued that female role stresses are particularly pronounced in traditional role situations.

A second line of thinking on sex differences and psychopathology lies in stressful events. With women appearing more vulnerable than men to the effects of stressful events, a significant interaction between sex and undesirable events is a predictor of distress and related mental health problems (Kessler, Price, & Wortman, 1985).

One interesting feature of the studies which attempt to relate depression and sex is that depression is more common in women, but that suicide is more frequent in men. High morbidity with low mortality in women, and low morbidity with high mortality in men has been observed in other health fields (Dorn, 1956).

Age:

Traditionally, depression has been considered an illness of the middle-aged and elderly. It is thought to begin during rare in infancy and childhood, first appearing clinically in adolescence, reaching its greatest proportions in middle years, and declining to some extent in the later years, (Silverman, 1968). However, greater attention is being paid to depression in young adults because of a rising suicide rate in persons of this age.

Although depression is thought to occur more frequently in older persons, Redlich and Freedman (1966) wrote that depression may be found in all age groups and is not uncommon in young adults. Other studies have found the peak age for reactive depression to be between 26 and 40.

The factor of age is important because it may influence the diagnosis of psychotic affective disorders and, thus, the reported age distributions of these conditions (Silverman, 1968). Schizophrenia, for example, is often thought of as a disease afflicting younger persons, while depression is considered an ailment of the middle-aged and elderly.

Race:

There have been discrepancies in studies which compare rates of depression in Whites and Blacks. Faris and Dunham

(1969) found no great racial differences in depressed individuals of different races except for the low percentage of Blacks with the depressed type of manicdepressive psychosis. Tonks, Paykel & Klerman, (1970) studied 220 depressed patients in New Haven and found no significant difference in the incidence of depression among Blacks and whites, nor in the symptomatology (Lester, 1988).

The first U.S. national survey of depressive mood based upon a random sample of the general population was assessed by the Depressive Adjective Checklist (DACL) (Lubin, 1981). The affective state of over 3,000 persons, including college students in both Canada and the U.S., has been assessed. Norms for all ages are available on the state version of the DACL ("how you feel today"). The DACL has been shown to be significantly correlated with such objective ratings of health, socioeconomic status, and education (Lubin & Levitt, 1979; Lubin, 1981). Cross cultural norms other than with Canadians of elderly subjects have not been yet established (Beckingham, 1988).

A growing body of research has also been done on the comparison of Americans of Mexican heritage with Anglos. There is consistent evidence that Americans of Mexican origin are underrepresented in treatment statistics relative to their proportions in the population. We find, therefore, a general view among minority scholars that Mexican Americans may have

much greater mental health needs (Kessler & Neighbors, 1983). There has also been considerable research on the possibility that minority communities and family structures provide protective resources that bolster the mental health of Hispanics.

To our knowledge no such research has been done on the mental health issues of the Arab minorities in the U.S.A., but our general view is that adaptation and acculturation leads to heightened psychological distresses by exposing the individual to conflicting values and pulling him away from the traditionally supportive environment that buffered him from the effects of life stress. It seems therefore, that the Arab-American mental patient is more often in a conflicted position between traditional Arab values and the more mainstream values of American society. To date this hypothesis has not been subjected to research.

Social Class:

One of the oldest and most firmly established associations in psychiatric epidemiology is the one between social class and mental illness. Until the early 1970s the dominant line of thinking was that lower class people were exposed to more stressful life experiences than those in more advantaged social status, and that this differential exposure accounted for the

negative relationship between class and mental illness (Kessler, Price, and Wortman, 1985). For example, Hollingshead and Redlich (Beck, 1974) found that the psychotic depressives were two and half times more frequent in the lower classes than in the upper. This view was challenged for the first time in the well-known Midtown Manhattan Study of symptom prevalence in the general population (Langer & Michael, 1963) which reported a consistent inverse correlation between social class and depressive illness. These researchers attempted to empirically demonstrate that the high incidence of mental health problems in the lower class individuals could be accounted for by greater exposure to stressful life experiences. Although this attempt was not confirmed, a more complex association was documented: that **stressful life experiences** have a greater capacity to provoke mental health problems in the lower class than in the middle class. Brown and Harris (1978) have later shown that this class-linked vulnerability to stress accounts for the major part of the association between social class and depression. Liem and Liem (Kessler, Price, and Wortman, 1985) provided evidence from a variety of sources that lower class people are disadvantaged in their access to **supportive relationships**, and that demonstrates that vulnerability factors are tied to one's class position in mental health. Other researchers (reviewed by Kessler, Price, &

Wortman, 1985) have also shown that **personality characteristics**, such as low self-esteem, fatalism, and intellectual inflexibility, associated with vulnerability to stress and mental illness including depression are more common among lower class people. A good example for such studies is the study done by Brown and Harris (1978) who documented that lower class people have fewer confidants than those in the middle class. We need more cross-cultural work to investigate the relationship between socioeconomic status and depression to help us develop a more complete understanding of ongoing socioeconomic stressors cross culturally.

Marital Status:

It is commonly thought that psychiatric disorders occur more frequently among the unmarried. It has been shown, for example, that there is a higher proportion of single people among those admitted to mental hospitals as compared to the general population, with a considerable proportion of this excess due to those admitted with a diagnosis of schizophrenia (Rees, 1982). However, most studies show that depression, unlike the other psychiatric illnesses, is more common in married individuals, (Schwab et al., 1981). In a study of neurotic depressive women in psychiatric hospitals, Briggs (1967) found that more of them were married rather than

single. Schwab, Brown, and Holzer (1967) found that depression was almost twice as frequent in the married as compared with the unmarried.

Culture, Mental Disorders, and Depression:

For wrong or right, many people associate the incidence of mental disorders with the complexity of civilization, and this implies that simple nonindustrialized societies are rather free from mental and emotional problems. Several cross-cultural studies carried out to investigate the frequency of mental disorders including depression in different parts of the world, will be summarized below.

It is important, however, to be cautious in interpreting the vast amount of literature on mental illness in peoples of various cultures. Observations in these studies are often impressionistic and misleading because of discrepancies in the definition of mental conditions and also societal attitudes towards psychiatric disorders (Silverman, 1968).

Murphy, Wittkower, and Chance (1967) conducted a questionnaire survey of psychiatrists around the world. He concluded that the frequency of depression does not appear to be related to religion, culture, social class, etc., but rather to the cohesiveness of the community.

Depressive disorder was thought to be virtually

nonexistent on the African continent until the 1950s. In a review of the literature on the incidence of depression in various parts of Africa, Collomb (1967) found that in incidence rates which varied from 1.1 % to 15 %, the discrepancies were due to methodological differences in the studies.

Rees (1982) summarized investigations of the Hutterite communities in North America which suggested that the incidence of mental disorder was lower than that in the general population. Hutterite communities are relatively stable and isolated, where people live under peaceful agricultural conditions. They have firm religious convictions, but in fact, detailed study showed that there is a relatively high proportion of manicdepressive illness present.

Studies on the prevalence of psychopathology in Arabic cultures have shown that Arab students in Kuwait, Libya, and Saudi Arabia score higher than comparable groups from the U.S. and England on neuroticism, shyness, and lack of self-assertiveness (Ibrahim, 1979; Ibrahim & Al-Nafie, 1988). However, one of the researchers (Ibrahim, 1979) argued that certain psychopathological concepts developed in the West may be understood by Arabs differently, therefore, further research is needed to explore the subjective cultural connotation of such concepts across cultures.

Another ethnic study by Caudill and Doi (reviewed by

Beck, Brady, & Quen, 1977) refers to the "air of mild depression that pervades Japanese life" and the high number of suicides in that country, most of which occur between the ages of 15 and 24. However, more recent studies have shown that the valid difference in suicide rates in different countries appear to have a bearing on social pressure relating to the act of suicide. More recently, however, Baron and Matsuyama (1988) noticed that the evidence for the comparative incidence of depression in the United States and other cultures, including Japan, is difficult to obtain. This is partly due to the fact that a fair number of depressed outpatients in many parts of the Eastern world are admitted to departments of medicine and surgery, indicating that clinical depression in other non-Western cultures is underestimated, and therefore, may not be useful for comparison with American hospitalization rates.

Apparently, the cultural differences in mental illness seem insignificant. The distribution of depression in a particular society seems to be mainly dependent on other group and socioeconomic influences inside any particular society. The present study will provide depression scores for Saudi students across several sociodemographic variables. By providing these scores, we will be able to look at prevalence within a Saudi sample of each symptom of depression and of certain sociodemographic variables. This will allow us to determine

what Saudi students display as normative symptoms (and therefore not diagnostic of depression) and what symptoms are diagnostic of depression. And finally, we will ask, do these particular symptoms represent those that are diagnostic of depression in the United States?

CHAPTER THREE

Goals, Objectives, Tools, and Methodology

Study Rationale

In the following, we shall identify some questions and hypotheses that we plan to study:

In Arabic cultures including Saudi Arabia, we know of no research done to identify the prevalence of depression nor of its relationship with ecology and sociodemography. Such a study is timely needed to determine the multifactorial causality nature of depression, and probably to help in setting mental health policies in developing cultures especially in Saudi Arabia. Obviously, our goal here is to explore such area of study and to test the hypothesis that a consistent relationship may exist between ecology and depression.

Second, it is planned to go beyond just looking at the demographic variables. We shall discuss social and demographic relationships, if any, in light of opportunities for growth, and relative powerlessness experienced by certain demographic groups inside the Saudi's culture as compared to those found in the West. As such, the research will be useful in

improving and guiding mental health policies and psychological and psychiatric services so that people can be aided in a more effective and guided way.

Third, depression as an illness has been recognized in Western medicine from Hippocratic times but its cross cultural validity is not clear. From our review of Literature, it seems that certain concepts related to interpretation of depression such as learned helplessness and marginality are concepts whose meanings are specifically tied to cultural definitions, about appropriate and inappropriate behaviors and relationships to others (Veroff, March 1989, personal correspondence). We feel, therefore, that comparing depression rates among different cultures will add a needed confirmation to this issue. Our research, at this point, is meant to provide an empirical answer towards this goal by comparing depression rates in Saudia with other countries, especially the U.S. where depression has been extensively studied.

Also, we feel that the **type** of depression identified by most psychiatrists includes a wider clinical picture, much of which may be culturally rather than psychobiologically determined. We will, tentatively, examine several psychological symptoms of depression to determine the variability of such symptoms cross culturally. We conceptualize that the general symptomatology **constellation** of depression as encountered in

Arabic cultures may differ in some respects with that seen in the U.S. We will examine the similarities and differences between Saudis and Americans in expressing depression symptoms like guilt, anxiety, social loneliness, or irritability. Although we will not be able to make empirical or statistical comparisons between the Saudis and the Americans, we will compare our findings with similar studies among the Americans. Scwab's studies of depressive symptomatology among Americans will be used as basis in such regard.

Goals and Objectives:

The goals of our research are: 1. To study depression symptoms rates in a group of Saudi Arabian students; 2. to examine the relationship between depression and sociodemographic variables including age, and socioeconomic status; and to 3. compare depression scores in Saudi Arabia with obtainable rates in the U.S.A.

Subjects and Methodology

Subjects:

A total of 250 undergraduate male students completed the scales and the questions included in this study so that they could be used in this sample. All Ss were volunteers recruited

from different college classes at King Saud University, Riyadh, Saudi Arabia. Their mean age was 24.1 years (SD = 4.2). Age ranged from 17.00 years to 33.00 years with the following distribution: 3.6 % ranged from 17 years to 18 years; 40 % ranged from 19 years to 21 year; 38 % ranged from 22 years to 24 years; 7.2 % ranged from 25 years to 27 years; 5.6 % ranged from 28 years to 30 years; and 5.6 % ranged from 31 years to 33 years. Most students lived in the university dorms, and were given a monthly allowance of almost SR 840 ($ 250) per month. The fact that the lowest personal income was less than the governmental allowance of the SR 840 was due to some of such governmental allowance being reduced, based on poor academic performance in some subjects of the sample. Sociodemographically, the sample had the following features: 82 % were Saudi born; others were from different Arabic and Muslim nations such as Sudan, Egypt, Morocco, Palestine. Family income ranged from 24.4 % under SR 5,300 ($ 1,480) per month to 14.0 % with monthly income of SR 10,000 ($ 2,500) or more. The family income was computed by adding both parents, and the subject's monthly income. Father's income, however, ranged from SR 1000 to SR 30,000 per month. Although all Ss came from Muslim families with relatively hemogeneous background in terms of the educational level of their parents, most of the educational background of the

parents did not exceed few years of college students. Ninety percent of the Ss were single, and 10 % were married.

Procedures:

All the subjects were asked to volunteer for a study based on scientific research. Were assured in writing on the cover sheet (Appendix 1) of the research questionnaire that this study is of a research nature, and it may offer no direct benefit for them. The subjects, of course, were given the choice of refusing to participate or may withdraw at any time during the research without creating harmful consequences to them. To assure confidentiality they were told that they did not have to write their names or give any identifiable information.

In small groups ranging from 5 to 15, the subjects were administered the Biography Questionnaire and the Depressive Symptomatology Scale. Both scales are described below:

Measures

The Biography Questionnaire:

The Biography Questionnaire (Appendix B) consists of items concerning major demographic, and biographic aspects, including:

1. Age

2. Marital status
3. Educational level
4. Citizenship and nationality
5. Personal income
6. Family income
7. Father's occupation
8. Mother's occupation
9. Father's years of education
10. Mother's years of education
11. Do you own a personal car?
12. Do your family has a private driver?
13. Do you have maids serving in your house
14. (If yes: how many......).

The Biography Questionnaire items were collected in order to give information about age, educational level, and socioeconomic status. The index for socioeconomic status is the total score for items: 5,6,7,8,9, and 10. Adding these scores to give a total socioeconomic score makes sense in light of the U.S. Bureau of the Census and based on research done by Myers and Bean (1964) who identified **education** and **occupation** as the two major indices of socioeconomic status. Because we thought that the Saudi society lacks occupation differentiation, we added **income (personal and parental)**

variable as another important indicator for socioeconomic status in Saudi Arabia. Since, many respondents declined to give answers, or gave inconsistent answers, on items 11 through 14, we have excluded those items from our present analysis.

The Depression Symptomatology Scale:

The Depression Symptomatology Scale consists of 18 items which have been used widely in research on depressive symptomatology (Schwab et al., 1981). They were based upon the conceptualization of depression as a syndrome, consisting of five major dimensions. These are (1) an affective disturbance with symptoms related to lowered mood, (2) some physical distress with a variety of somatic symptoms, (3) altered patterns of psychobiologic activity, such as sleep, appetite, etc., (4) a negative self-evaluation involving lowered self-esteem, self-blame, suicidal ideation, and a sense of guilt, and (5) an existential typified by pessimism, despair, and a gloomy outlook on the future. This multidimensional concept was derived by Schwab and others (1981) from the work of Abraham, Freud, Rado, Fenichel, Bibring, and others.

The 18 depression items are shown in Appendix C.

The Reliability and Validity of the Scale:

To guarantee that the Depressive Symptomatology

Questionnaire is a valid and reliable tool for comparison and for achieving the research purposes, we computed both reliability and validity. For the total scale we computed Cronbach's Alpha as a measure of internal consistency. The items had an overall Alpha coefficient of 0.84, well above the limit accepted for scalability.

The Arabic translation of the Depressive Symptomatology Scale (Appendix C) was taken (by permission) from Ibrahim and Al-Nafie (1989). The Arabic translation used is standard Arabic language that was validated in Saudi Arabia and checked for accuracy by the original translators. Accurate translation was given for each item except item # 18 which was modified to read as follows: How often would you feel that the future looks gloomy to you?

In scoring the **Depressive Symptomatology Scale**, we followed the same technique used by Schwab and others (1981). Therefore, all the items were answered on a three-point scale: **never**, **frequently**, and **always**. Each item was rescored on a three-point score: **0** for **never**, **2** for **frequently**, and **4** for **always**. The highest score then should be 72. This rescoring formula was used in scoring all the items except item # 1 which reads as follows: **Do you feel in good spirits?** For this item the scoring was reversed to: 0 for always, 2 for frequently, and 4 for never.

By using the internal consistency method of **reliability** estimation, the scale had an Alpha coefficient of 0.90, that is psychometrically well accepted for consistency.

To make sure that the Depressive Symptomatology Scale measures depression in Saudi Arabia as is the case in U.S., the researcher administered this scale along with the Multiple Adjective Checklist (Appendix D) which was developed to measure depressive mood along with hostility and anxiety moods (Zuckerman & Lubin, 1965; Lubin, 1981). The Multiple Adjective Check List consists of negative adjectives such as: **unhappy and listless**, and positive adjectives such as **strong, lucky, free**. The scale requires the subjects to respond by checking every adjective that describes "how they feel today." In scoring the multiple adjective checklist, we used the scoring keys for depression scale to compare it to Schwab's Symptomatology Questionnaire scores.

The two scales were given to a separate group of 30 Saudi college students, and the scores have been correlated and compared with each other. The correlation between the Schwab Symptomatology Questionnaire and the depression score on the Multiple Adjective Check List was .61, which implies high construct validity for the tools.

Another validity study comes from Ibrahim & Al-Nafie (1989) in which the Depression Symptomatology Scale and the

Symptoms Inventory known as the Psychopathology Symptoms (Appendix C) were both given to over 200 college students in Saudi Arabia. The Symptoms Inventory comprises 27 items selected by Ibrahim and Al-Nafie from major psychological tests of psychopathology such as the MMPI and the Eysenck Personality Questionnaires. Items on the Symptoms Inventory reflect a number of psychopathological behaviors that go with major psychological disorders such as sleeping disorders, drug use, lack of attention, hallucinations, etc. Ibrahim and Al-Nafie cited evidence of the validity of their tool. The Pearson Product Moment method yielded a correlation of 0.73, adding some support for the validity of the present symptomatology scale.

Statistical Analyses

The following statistical analyses were performed:

1. **Frequency Distribution:** In order to determine the frequency on each depression item (18 depression items) in the sample, and the percentage of answers on each response mode (**never**, **frequently**, or **often**), we performed grouped and ungrouped frequency distribution for each depression item in tabular formats, with cumulative frequencies, percentages, and descriptive statistics (Madigan, 1987).

Our results were compared with similar results collected from research done in the U.S. by Schwab and others. Of

particular relevance here is the study done by Schwab et al. in 1981.

2. Pearson Correlations: In order to determine the relationship among the sociodemographic variables and depression, a Pearson Correlation Matrix (10 variables) was developed to correlate the following variables: depression total score), age, marital status, citizenship, residency (city or country), own income, father's income, father's education, mother's income, and mother's education.

3. Analyses of Variance: A number of one-way analyses of variance procedures (Simple Randomized Design) were performed. Significance of the effects of each independent sociodemographic variable on the dependent variable of depression were tested.

In addition, analyses of variance were used to examine the effects of depression levels on the sociodemographic variables. Therefore, the sample was divided into three levels of depression based on each subject's score on the Depressive Symptomatology Scale, as follows: High Depression Scorers (HD), Moderate Depression Scorers (MD), and Low Depression Scorers (LD). The criteria used in grouping the sample was simple: the top 20 % were grouped together in the High Depression Scorers subgroup; the lowest 20 % were grouped into the Low Depression Scorers, the remaining formed the

Moderate Depression Scorers.

The three depression groups were compared with regard to the sociodemographic variables of age, income, citizenship, and so forth.

4. On a number of variables $\underline{t}$-tests were performed to test for the significance of differences between groups independent variables) on depression (dependent variable). The independent variables used were: Young vs. Old; Saudis vs. non-Saudis; City origin vs. Country origin; High income vs. Low income; and Married vs. Nonmarried.

CHAPTER FOUR

Results

In this section we will focus on the major results of our studies including sample size and characteristics.

Subjects:

The Ss consisted of a heterogeneous group of university undergraduate students living in the King Saud University dorms. Subjects were of varying ages of Saudi born and others from different Arabic and Muslim nation. The choice of university students to represent the study sample is based on several useful criteria. College education in Saudi Arabia is provided by the government free of charge; therefore, and unlike the Anglo-American societies, the student population in Saudi Arabia is a less restricted one and represents quite heterogeneous SES groups, not only with middle or upper class affiliations, as is the case for university populations in the West. We need such heterogeneity to reach some reasonable representation of all possible social groups in the Saudi society and wide demographic distributions that will provide different

variables to explain differences in depression levels.

It could have been more appropriate, however, to study demographic and SES variables associated with psychiatric patients diagnosed as depressives. Our attempts to reach such psychiatric samples were, unfortunately, aborted due to several governmental restrictions assigned by the Saudi Ministry of Health on carrying out research by foreign researchers.In addition, symptoms of clinically depressed persons in psychiatric settings have been shown to be essentially similar and homogeneous (e.g., Sartorius et al., 1983; Baron & Matsuyama, 1988). Therefore, reports of symptomatology in nonclinical populations are more useful for making group comparisons across sociodemographic lives. Further, there is additional evidence indicating that many cases of depression in non-Western societies are treated in medical and surgery wards and not in regular psychiatric settings as is the case in the United States (Hama, 1966), suggesting that depressed patients in psychiatric settings may disrepresent clinical depression in the third world.

A total of 250 undergraduate male students completed the scales and the questions included in this study so that they could be used in this sample. All Ss were volunteers recruited from different college classes at King Saud University, Riyadh, Saudi Arabia. Their mean age was 24.1 years (SD = 7.2). Age

ranged from 17.00 years to 33.00 years; with the following distribution: 3.6 percent ranged from 17 yrs. to 18 yrs.; 40 percent ranged from 19 yrs. to 21 yrs.; 38 percent ranged from 22 yrs. to 24 yrs.; 7.2 percent ranged from 25 yrs. to 27 yrs.; 5.6 percent ranged from 28 yrs. to 30 yrs.; and 5.6 percent ranged from 31 yrs. to 33 yrs. Most students lived in the university dorms, and were given a monthly allowance of almost SR 840 ($ 250) per month. The students' personal income ranged from SR 500 to SR 8000. The fact that the lowest personal income was less than the governmental allowance of the SR 840 was due to that some of such governmental allowance was reduced based on poor academic performance of some subjects in the sample.

Sociodemographically, the sample had the following features: 82 % were Saudi born; others were from different Arabic and Muslim nationals such as Sudan, Egypt, Morocco, and Palestine. Family income ranged from 24.4 % under SR 5300 ($ 1,480) per month to 14.0 % with monthly income of SR 10,000 ($ 2,500) or more. The family income was computed by adding both parent's and the subject's monthly income. Fathers' income, however, ranged from SR 1,000 to SR30,000 per month. Although all Ss came from Muslim families with relatively varied backgrounds in terms of the educational level of their parents, most of the educational

background of the parents did not exceed few years of college studies. Ninety percent of the Ss were single, and 10 % were married.

Rates and Frequency Distribution of Depression Variables:

Table 1 shows frequencies and percentages of subjects who answered each depression item by:

Almost Never	(0)
Frequently	(2)
Almost Always	(4)

Certain depressive symptomatology as expressed by our subjects in higher rates than others. The following Table 1 reports the frequency distribution of each item.

TABLE 1

Frequency Distribution For Depression Items on the Depressive Symptomatology Scale

Answer	Frequency	Cumulative Frequency	%	Cumulative %
Good Spirits:				
0 (Almost Always)	74	74	29.6	29.6
2 (Frequently)	155	229	62.0	91.6
4 (Almost Never)	21	250	8.4	100.0
Things Turn Out Wrong:				
0 (Almost Never)	97	97	38.8	38.8
2 (Frequently)	113	210	45.2	84.0
4 (Almost Always)	40	250	16.0	100.0
Self Blame: *				
0	110	110	44.0	44.0
2	102	212	40.8	84.8
4	38	250	15.2	100.0
Nothing Worth:				
0	128	128	51.2	51.2
2	82	210	32.8	84.0
4	40	250	16.0	100.0

TABLE 1 (Continued)

Answer	Frequency	Cumulative Frequency	%	Cumulative %
Feeling Tired in the Morning:				
0	137	107	54.8	54.8
2	85	222	34.0	88.8
4	28	250	11.2	100.0
People Don't Care:				
0	139	139	55.6	55.6
2	85	224	34.0	89.6
4	26	250	10.4	100.0
Appetite Loss:				
0	142	142	56.8	56.8
2	82	224	32.8	89.6
4	26	250	10.4	100.0
Troubled Sleeping:				
0	152	152	60.8	60.8
2	68	220	27.2	88.0
4	30	250	12.0	100.0
Trouble Getting to Sleep:				
0	154	154	61.6	61.6
2	62	216	24.8	86.4
4	34	250	13.6	100.0

TABLE 1 (Continued)

Answer	Frequency	Cumulative Frequency	%	Cumulative %
Couldn't Take Care of Things:				
0	156	156	62.4	62.4
2	75	231	30.0	92.4
4	19	250	7.6	100.0
Don't Enjoy Doing Things:				
0	165	165	66.0	66.0
2	61	226	24.4	90.4
4	24	250	9.6	100.0
Crying Spells:				
0	167	167	66.8	66.8
2	53	220	21.2	88.0
4	30	250	12.0	100.0
Bothered by Body Ailments:				
0	186	186	74.4	74.4
2	42	228	16.8	91.2
4	22	250	8.2	100.0
Gloomy Future:				
0	192	192	76.8	76.8
2	42	234	16.8	93.6
4	16	250	6.4	100.0

TABLE 1 (Continued)

Answer	Frequency	Cumulative Frequency	%	Cumulative %
Feeling Alone and Helpless:				
0	198	198	79.2	79.2
2	34	232	13.6	92.8
4	18	250	7.2	100.0
Powerlessness:				
0	202	202	80.6	80.6
2	30	232	12.2	92.8
4	18	250	7.2	100.0
Feeling Life is Hopeless:				
0	217	217	68.8	68.8
2	20	237	8.0	94.8
4	13	250	5.2	100.0
Thoughts of Suicide:				
0	230	230	92.0	92.0
2	12	242	4.8	96.8
4	8	250	3.2	100.0

* Items from 3 through 18 are scored following the same scale used for item 2 above.

Inspection of Table 1 above shows the following results:

1. The following items were reported as frequent, and almost always by more than 50 % of the subjects:

"Do you feel in good spirits?'

Table 1 shows that a total of 70 % have answered in 9 the nondepressed direction. (This item was scored in a reversed direction, i.e., almost never obtains 4 scores, frequently obtains 2, and almost always obtains 0.) Unlike the rest of the tables, in this table the almost always response should read 8.4; while almost never should read 29.6, indicating that about 29.6 % of our Ss reported that they never felt in a bad mood (less depressed).

"How often would you say that things don't turn out the way you want them to?"

As displayed in the above table, a total of more than 61 % reported that they either frequently or almost always felt that things didn't turn out as they wanted them to.

"When things don't turn out, how often would you say you blame yourself?"

A total of 56 % indicated either frequent (41 %), or always (15 %) blamed themselves.

2. From 30 % to less than 50 % answered in the depressive direction on the following items:

"Do you sometimes wonder if anything is worthwhile anymore?"

Almost 49 % answered positively to this question, with almost 33 % reported that they "frequently" wondered if anything is worthwhile anymore; while 16 % felt that they "always" so wondered.

"Do you tend to feel tired in the morning?"

A total of 45 % report frequently and always answers to this question. As can be seen from the table: 34 % indicated that they "frequently" feel tired in the morning, while 11 % reported that they "always" felt so.

"How often do you feel that people don't care what happens to you?

In **Table 1** we additionally see that 34 % indicated that they "frequently" have the feeling that people don't care, and 10 % reported that they "always" had this feeling, with a total of 44 %.

"Do you ever have loss of appetite?"

The results in Table 1 show us a total of 43 % approve of this statement; almost 33 % indicated "frequent" appetite loss, while 10 % reported this symptom as "always" happening.

"How often do you have trouble with sleep?"

From Table 1, it can also be readily seen that a total of 39 % expressed either frequent (27 %) or always (12 %) had

trouble with sleeping.

"Do you have any trouble getting to sleep and staying asleep?"

According to the table, 25 % answered frequently, while almost 14 % answered always.

"Have you ever had periods of days or weeks when :you couldn't take care of things because you couldn't get going?

Table 1 also shows the total of approval for this statement which was almost 38 %; 30 % frequently, and 8 % always.

"How often do you feel you don't enjoy doing things any more?"

The results in the above table show us that a total of 34 % expressed either frequent (24 %) or that they always (10 %) didn't enjoy doing things any more.

"How often do you have crying spells or feel like having them?"

According to the table, about 33 % indicated they either frequently (21 %) or always (12 %) are suffering from crying spells.

"Do you feel that you are bothered by all sorts of ailments in different parts of you body?"

The results for this item shows us that about 25 % complained of all sorts of ailments in different parts of their bodies.

"How often do you feel that the future looks gloomy?"

The frequency distributions for this item show that only 23 % expressed the feeling that the future is gloomy.

"How often do you feel alone and helpless?"

Only a total of 21 % indicated that they frequently (14 %) and always (7 %) have felt alone and helpless.

3. The following items were less frequent: 20 % or below expressed that they suffer from the symptoms represented by an item:

"How often do you feel that life is hopeless?"

A low percentage (13 %) indicated that they have felt so.

"Life has changed so much in our modern world that people are powerless to control their own lives."

About 19 % complained that people are powerless.

"How often do you think about suicide?"

Only 8 % indicated that they think about suicide. Table 1 displays the frequency distribution for this statement. Two hundred and thirty subjects indicated that they never thought about suicide.

Comparing Saudis With Americans:

From a cross-cultural view, our results can be compared to the results of Schwab, Holzer, Warhett, and Schwab (1981),

which were similar to our study in many ways. They used the same depression tool (Schwab Symptomatology Questionnaire), and they also used about 270 students in their study, in addition to other subjects. The present writer also relied on another study by Schwab (1979) to compare the relationships between depression and sociodemographic variables cross-culturally. Since these two studies have been carried out in the United States, their results would meet our purpose for cross-cultural comparisons. For convenient comparisons with American results, the following table (Table 2) displays Schwab and his colleagues' results of the percentages of response to depression items:

TABLE 2

Percentages of Ss Reporting Depression Items in American Samples

(Resource: Based on data taken from Schwab, Holzer, Warheit & Schwab, 1981)

Items	Percent
Powerlessness	32
Gloomy Future	8
Bothered by body ailment	3
Could not take care of things	3
Feeling alone and helpless	7
Don't enjoy doing things	8
Crying spells	7
Troubled sleeping	15
Trouble getting to sleep	16
People don't care	8
Low spirits	3
Appetite Loss	3
Feeling life is hopeless	4
Things turning out wrong	12
Nothing worth	7
Tired in the morning	13
Thoughts of suicide	3
Self-blame	23

*Percentages were computed by the writer based on data provided by Schwab et al. (1983). Approximation to the closest one was done to avoid fractions.

Comparing the American results with those of the Saudis, it is obvious that the Saudis report much higher depression variables than the Americans in almost all items. This result will be discussed in the next section in light of the differences between developing and Anglo-American (cultures in depressive symptomatology.

We will not be able, however, to compare percents of Americans and Saudis on the specific depression items because the basis of scoring the scale was different in the two studies. Schwab and his colleagues scored some items on a three-point basis and some on a five-point basis; while the scale in our study was scored on a three-point basis. In spite of the difficulty of making statistical comparisons between the two nationals item by item, we will be able to benefit from the general trends of the results in the two studies to reach some exploratory insights about the distribution of depressive symptoms in Saudi Arabia in comparison with other cultures.

Depression and Sociodemographic Variables:

The Pearson correlations matrix (28 X 28) among the

total depression score, the 18 depression items, and the sociodemographic variables including age, marriage, citizenship, origin of permanent residence, and personal income is shown in Appendix E. This appendix should be read as follows: Variable 1 (labeled as DEP) represents total depression scores; variables from 2 through 10 represent the sociodemographic variables of age, marital status, citizenship, origin (city vs village), personal income, father's income, father's years of education, mother's income, and mother's years of education. Variables from 11 through 28 represent the 18 depressive symptomatology scale items in the same order shown before (chapter 3).

Obviously all the depression items correlate well above the average with the total score. This adds further confirmation regarding the validity of this scale. However, no such pattern of significance is seen in regard to the relationship between total depression score (variable 1) and social demographic variables. Obviously, depression is quite independent from the sociodemographic variables used in this study.

Social variables showed some patterns of correlations with depression variables, however. For example:

a. Father's years of education was indicative of reduced depression as expressed in decreased feelings of being alone and helpless (item # 14; $r= -.19$, $p < .003$), reduced feelings

that people don't care (item # 15; $r = -.15$, $p < .01$), less sleeping troubles (item # 21 $r = -.13$, $p < .05$), and lesser feelings that life is hopeless (item # 15; $r = -.12$, $p < .05$).

b. Personal income was the second indicator of lower depression scores as reflected in decreased feelings of being alone and helpless (item # 14; $r = -.14$, $p < .05$), less gloomy feelings about the future (item # 28; $r = -.13$, $p < .05$), and less physical ailments (item # 18; $r = -.13$, $p < .05$).

c. The third social factor is age. Age was significantly but negatively associated with item # 25 about loss of appetite indicating that the older the age the less the complaints about loss of appetite ($r = -.14$, $p < .01$).

d. Mother's income was inconsistently associated with three depression symptoms: positively with physical ailments ($r = .21$, $p < .001$) and item # 13 about not enjoying doing things anymore ($r = .15$, $p < .01$). The negative correlation was with low spirits ($r = -.18$, $p < .01$). Obviously the higher the mother's income is, then, associated with high spirits, but this implies more physical ailments and lack of enjoyment doing things.

It may be concluded, then, that the overall depression syndrome total score is independent of social demographic variables. However, certain and specific depression symptoms associate significantly with some demographic and socioeconomic variables particularly age, personal income,

number of years of parent's education, and their income. It may be important, therefore, to deal with depression symptoms separately and study them as specific symptoms to identify their relationships with social factors. Thus, we felt it may also be useful to study depression under different sociodemographic subgroups.

Differences in Depression among Sociodemographic Subgroups:

Results concerning differences in depression among social subgroups in relation to depression was made by using ANOVA Simple Randomized Design. Results were shown by number, means, and Newman-Keuls test differences. Results will be displayed in tabulated forms, but the discussion of this section and previous section will be delayed for the next chapter.

Notable differences were:

1. Age (Table 3):

The highest mean depression was in the young group, followed by moderately aged group, with the oldest group last. Obviously in a university setting such as that in Saudi Arabia, the younger the person the more he is exposed to depression. It may be speculated that younger groups are exposed to more stress than those who are more advanced in age, thus causing

higher degrees of depression in the younger groups.

TABLE 3

Analysis of Variance of Depression by Age

Source	SS	df	MS	F	P
	255.929	2	127.964	4.312	.03
	9040.190	234	38.633		
Total	9296.120	236			

	Age		
	Young	Middle	Old
n	58	83	96
m	28.37	26.60	25.84
s	5.64	6.78	6.01

Note: ANOVA Simple Randomized Design. Dependant variable: depression. Significant differences were made by using Newman Keuls test.

2. Marriage (Table 4):

Married Ss report lower but insignificant depression score (mean = 25.96) than single Ss (26.98).

TABLE 4

Analysis of Variance of Depression by Marriage

Source	SS	df	MS	F	P
	27.186	1	27.186	.661	.42
	10154.893	247	41.112		
Total	10182.080	248			

	Marriage	
	Married	Single
n	30	219
m	25.96	26.98
s	6.37	6.41

Note: ANOVA Simple Randomized Design. Dependant variable: depression. Significant differences were made by using Newman Keuls test.

3. Personal Income (Table 5):

The higher the income the lower the reported feelings of depression. The differences are significant beyond .05 level.

TABLE 5

Analysis of Variance of Depression by Income

Source	SS	df	MS	F	P
	26.423	2	13.211	.353	.67
	8924.106	239	37.339		
Total	8950.529	241			

	Income		
	High	Average	Low
n	12	28	202
m	25.33	26.46	26.72
s	4.49	5.09	6.30

Note: ANOVA Simple Randomized Design. Dependant variable: depression. Significant differences were made by using Newman Keuls test.

4. Father's Income (Table 6):

Ss who came from families in which the father was of average income report lower depression feelings, as compared to both high and low father's income groups.

TABLE 6

Analysis* of Variance of Depression by Father's Income

Source	SS	df	MS	F	P
Father's Income	49.298	2	24.649	.601	.55
	5001.459	122	40.005		
Total	5050.758	124			

	Father's Income		
	High	Average	Low
n	109	11	5
m	26.93	24.90	28.00
s	6.16	8.12	7.58

Note: ANOVA Simple Randomized Design. Dependent variable: depression. Significant differences were made by using Newman Keuls test.

Negligible depression differences were noted in regard to father's education, citizenship, and birth origin variables.

Comparisons Among Different Levels of Depression:

This last section of the results shows to us the differences between High Depression Scorers (HD), Moderate Scorers (MD), and Low Scorers (LD). As we have explained earlier, the criteria used in grouping the sample included grouping together the top 20 % on the Depressive Symptomatology in the HD subgroup (N= 49), the lowest 20 % scorers were grouped in the LD group (N= 66); while the remaining 135 subjects formed the MD group. The three depression groups were compared with regard to the sociodemographic variables by using the ANOVA simple Randomized Design.

Confirming some of the results in section three above, significant differences ($p < .05$) were noted among the three depression subgroups regarding age, and education variables.For age, HD's were generally younger, followed by the middle group, and then the older group, respectively. The result that younger students in Saudi Arabia were on the whole more depressed than their senior counterparts may seem peculiar in light of research on depression rates which generally shows that depression is more common in older ages (DSM III-R, 1987). We will discuss this result in the next chapter. Further, high depressives have higher rates (but not significant) of marriages than low depressives or middle depressives. Both personal income, and father's income were higher in the middle

depressives followed by low depressives and high depressives. A significant differences were noted in regard to father's education, i.e., HD's group has the lowest level of education among the fathers, followed by MD's, while the lower group in depression has the highest. We will comment on the consistencies and inconsistencies in these results and other results in the next chapter.

CHAPTER FIVE

Discussion

Given the results about depression frequency among the Saudi sample as a whole, it is reasonable to conclude that more Ss have reported depressive symptoms related to **two** major depression dimensions: first, the **negative self-evaluation** dimension which consists of items indicating blaming self, low spirits, and the feeling that things didn't turn out as expected. The second dimension relates to **physical distress and somatic symptoms**. Obviously, poor appetite, disturbed sleeping, feeling tired, crying spells, and ailments in the various parts of the body were reported by our Saudi Ss more frequently than those reported by their American counterparts. These data provide very good confirmation for cross cultural studies of depression.

The high rates of depression symptoms among the Saudis may be explained in various ways. At the simplest level it may be necessary to distinguish between depression as a normative expression of attitudes in Saudi Arabia, and depression as a pathological trend. Clearly, items related to feelings of low spirits, feeling that things don't turn out as we wish them to,

and blaming oneself, were answered by extremely higher proportions than usually reported for depression rates in other cultures. Such statements may be seen as expressing normative attitudes and not necessary indicative of depression as a psychotic disorder. Based on years of experience of living in this culture and the observations of many writers, and friend psychologists and psychiatrists familiar with the region, one can say that the average Saudi does exhibit certain types of behavior that may be confused with depressive symptoms. The average Saudi usually talks in a soft tone of voice and walks in an unhurried and slow manner. Melikian (1977) in his study of the Saudi modal personality indicated some confirming results. Melikian's data suggested that the average Saudi expects to be liked and accepted by everybody. He is strongly dependent, and because of this dependency, the average Saudi tends to remain on guard against anything that might disrupt his relationships with others and to be on the lookout for any signals of rejection. The main concern of the Saudi, according to Melikian, appears to be in the maintenance of amiable relationships with others. The Saudi exercises extreme caution not to hurt the feelings of others or their dignity. This assures him that his own feelings and dignity will not be hurt in return. Although such behavioral and temperamental characteristics--including the way they talk and walk, their dependency, fear of rejection, avoiding hurting

others--are not considered depression per se, they can easily be mistaken as symptoms of depression in studies of depression and personality. Concepts such as lack of assertiveness, slow speech, dependency, fear of rejection which have usually been reported by researchers of depression can be seen as very related to the above modal characteristics of the Saudi personality.

From a psychopathological view, the high prevalence of depressive symptoms in the Saudi sample may be explained in other ways. It may relate to the notion that in developing cultures where psychiatric facilities are scarce, and psychological problems are not recognized as problems that need psychotherapy, depression, and related distresses can become more frequent than in the cultures which have developed more understanding of the causes and treatment of mental and emotional difficulties including depression. An American depressed student has learnt about depression, and he/she realizes that this may have psychological and medical causes that can be discussed directly with professionals. If a student in a developing culture experiences depression, he/she can probably find no professionals available for consultation. This may lead to a large numbers of people with psychological distress are left without appropriate intervention.

A second interpretation may lie in the nature of the Saudi

society and the cultural and social changes in this part of the world. Comparative historical studies indicate that depression (and rates of melancholia) has been frequent during transitional epoches, and at junctures in history when an era's forms and its ethics are rejected as obsolete (Schwab et al., 1981). The current accelerated rate of social change in Saudi Arabia, crowding, and a bombardment of external stimuli, is well documented and can be seen as creating complications for the adaptability of the individuals involved in this process. The individual, becoming a target of external demands and outer aggression may try to serve his energy, or even become the target of his retroflexed aggression by attempting to withdraw. In a sense, the increased depressive reactions by our Saudi Ss might be considered semiadaptive in such a society because it insulates the person against excessive societal demands. That accelerated social and cultural change are correlated with high incidence of psychopathology is well documented in several sociological studies (e.g., Coleman, Butcher & Carson, 1987; Engelsman, 1982; Wirtenberg & Richardson, 1983). Relevant here are Engelsman's (1982) reported studies on depressive illness over the last three decades, especially among developing cultures which show an increased trend toward morbidity, especially in psychoneuroses, including depression.

A third explanation was brought to our attention by Verof

(personal correspondence). It is possible that the extreme elevation of Saudi student's responses endorsing depressive symptoms reflects a cultural difference in the meaning of the items for them. Confirmation for this point comes from inspection of the correlational matrix which reported intercorrelation among depressive items. Other than the high correlations between total depression score and the items, we find that the correlation among the items themselves were relatively very low, indicating that emotional depressive states in Saudi Arabia may be differentiated and not unidimensional factors as we may think. In light of this explanation, it may be concluded that the higher percentages (which reaches more than 50 % in some cases) acknowledge being frequently or almost always suffering from depressive symptoms (e.g., low spirits, blaming self, things turn out wrong, etc.) are probably expressing a normative way to describe one self among the Saudi students. Obviously, further research is needed to explore the subjective connotation of depression across cultures. Techniques such those used by Triandis, Kilty, Shanmugan, Tanaka & Vassiliou, (1972) in their analysis of subjective culture seem to be very relevant to meet this purpose. Further research is also needed to explore what explanation(s) may be appropriate to account for such elevated psychopathological trends in the Saudi society.

The specific expression of depression in the Saudi sample is worth comment. Cultural studies of depression show that people inflicted with psychopathological disorders in the developing countries tend to somatize their psychic distress. Studies comparing depression in several developing countries show that Somatic Symptoms--Gastrointestinal disorders--are reported more frequently by simple unsophisticated groups such as rural patients, while feelings of guilt are reported more frequently by more sophisticated urban depressives (German, 1972; Sethi & Sharma, 1985). Relevant here also, is the distinction made by psychopathologists between depression as a particular experiential state and depression as a somatic or somatized disturbance (Fernando, 1985; Marsella, 1978). Cross-cultural studies reported by Engelsman (1982) indicate that non-Western depressives show more somatic complaints. For example, in Indonesia and Iran (two developing Islamic cultures) depressed patients displayed a loss of vitality and expressed frequent somatic symptoms, while the German depressive patients manifested the classical picture of melancholia, with decrease of efficiency, feelings of guilt, and suicidal tendencies (Engelsman, 1982).

It may, also, be the same case here. Our Saudi Ss do report **somatic and physical symptoms** frequently and relatively more than is usually reported in the West (Sartorius, Jablenski,

Gulbinat & Ernberg, 1980; Sartorius, et. al., 1983). Again, such differences may be due to a different vocabulary adopted by the developing and the Western cultures for expressing depression. It is generally believed that Western Ss are more exposed to mental health and psychiatric knowledge which make them more sophisticated when it comes to expressing their feelings and their emotional states. Rack (1982) argued in support of this point and indicated that the English language is extremely rich in words to describe mood states. In addition to "depressed," one can be despondent, despairing, disconsolate, dispirited, disillusion, gloomy, melancholy, unhappy, sad, morose, blue, miserable, and so on.

Ss in developing cultures are obviously less exposed to similar influences, making them more simple, and, therefore, being more familiar with somatic complaints of their psychic distress. Ibrahim (1982) added that cultural support is needed, in a study done on a similar culture (Egypt). He found that physical complaints emerged as a strong factor in the analysis of similar constructs such as the Eysenck's neuroticism dimension.

However, there were some **subjective experiential** symptoms reported more frequently by our Saudi sample, such as blaming self, wondering if anything is worthwhile anymore, feelings thus things don't turn out the way we like them to.

Given the background of this sample (university students), and the increasing social and educational development in Saudi Arabia, it is obvious that people there are becoming more able to express their experience of depression more accurately and more frequently than we think. If the notion that the more Westernized a culture becomes, the more psychological components are included in the picture of depression, we may then conclude that the more the Saudis head toward Westernized living styles, the more depressed people will exhibit the classical picture of depression as combination of experiential and somatized forms.

It is noteworthy that thinking about suicide, feeling that the future is gloomy and life is hopeless, are expressed relatively less frequently by Saudis and much lower than the other items of depression. This is difficult to explain, but it could reflect the strong religious attitudes of Saudi Arabians toward suicide and its correlates (e.g., gloomy future, hopelessness, etc.). Islam is the religion of all our Ss, and is the religion accepted and practiced by most to the people in Saudi Arabia. The Islam religion is of major concern regarding the legislation, politics, social relations, and even personal commitments among the people in Saudi Arabia. The Muslims in that part of the world do strongly practice their faith, and accept the **Quran** as the work of God Himself. Quran is the

Muslim's Holy Book, and as such it represents the chief doctrine dictating the life in the community of the faithful." The Quran is very clear about killing one self. It prohibits suicide and foresees no salvation in the afterlife of those who end their lives by such a deed. Islam also encourages people to depend on God and to rely on His will when it comes to future problems and fate. There are many Quranic verses that tie faith with hope and reliance on the power of Allah, rather than one self-destruction. At this point, it seems that strong religious beliefs are advantageous for the protection of people from one of the most damaging influences of depression--suicide. The statistics on suicide in Arab countries do confirm this and show that the suicide rate is the lowest in any of the Muslim cultures (Sartorius et al., 1983). It was also found that suicidal thoughts were reported by only less than 30 % of the depressed patients in Iran, as compared to an average ranging from 51 %-75 % in comparative groups of depressed patients in Switzerland, Canada, Nagasaki, and Tokyo (Sartorius et al., 1983).

The data on depression and **sociodemographic** variables clearly show that depression is more common among those with lower incomes, those who come from lower-income families, who are unmarried, and those who are young as compared to their older counterparts.

The result that **low income** (personal and family) is

positively related to depression is in no way contradictory to research done in other parts of the world. Schwab et al. (1981) reported, in a similar study by using the same scale we have used in our research, that substantial percentages of low income persons expressed, more than high income persons, feelings and attitudes of depression including powerlessness, beliefs that people don't care about them, and that they are alone and helpless. Schwab suggested that it may be difficult sometimes to know whether symptomatic responses are indicators of depressive illness or manifestations of lower socioeconomic status.

Although we have reported in chapter 2 some research done in the West indicating that depression may be more common in married individuals, our findings show that marriage among Saudi students insulates the person against depression. Although we cannot speculate a lot about this difference, a word about the psychological implications of marriage for males in Arab cultures may be in order. In a male-dominated society which puts many restrictions on male-female relationships, marriage can provide the person with greater opportunities for being in control. In marriage, Arab males are given more chances than single ones to socialize, and make decisions relating to economic support, sex, etc. This leaves the married male in a more positive position and provides him

with social support that acts as a shield against psychopathology. Since the married Ss in our study were underrepresented, it may be necessary to carry out further research with females included to study in a more meaningful way the relationship between marriage and psychopathology in Saudi Arabia.

The result that **younger students** are more depressed than their older colleagues may appear inconsistent with previous research on depression and age which shows that depression is the sickness of the older and the middle aged. Our results may seem difficult to explain, but it could be understood in light of two hypotheses. The first is the attitude of Saudi Arabians towards older groups, whom they respect highly as having more status and more control within social situations. Thus, problems of depression and negative self-evaluations are less frequent among the older counterparts. The second interpretation lies in age distribution in our sample. Elderly and middle-aged groups are underrepresented, causing therefore, a difficulty in comparing our results with previous research on depression and age. Keeping this in mind, our current results indicate that in a rather homogeneous age group such as university students, Ss who are younger may experience higher adjustment stresses than their seniors who are in more control due to more exposure to university life. Thus, younger students frequently report more feelings of depression than

their older colleagues. Support of this conclusion comes from a Saudi Arabian cross-cultural validation study of the Beck Depression Inventory (BDI) (West & Al-Kaisi, 1982). An Arab sample of 53 patients drawn from routine admissions to the psychiatric outpatient clinic of a large hospital in Saudi Arabia, were given an Arabic version of the BDI. The researchers found that compared with Beck's American studies, the correlation between age and the Arabi-BDI scores were insignificant. The majority of depressed patients in the Arab sample were in the 15- to 24-year-old age range, while in Beck's combined sample the majority were in the 25- to 34-year-old age range, contradicting the common belief that older patients are more depressed. Another study showed that no age differences were demonstrated in Saudi Arabian psychiatric patients in strongly related depressive construct and labeled as psychosocial stresses (Chaleby, 1986). Also, in a recent review of the relationship between age and depression, it was observed that neurotic depression was markedly associated with the married state of women for almost all age groups, but it was most evident in younger age groups of 25-34 years (Birtchnell, 1988). Young and married woman may seem analogic to a young university students in that they both contribute the most to the rates of depression. In light of these studies and in light of the present finding, it is logical to assume that the contribution of

age factor to depression does not lie in age itself, but in the quality and types of stresses, crises, and lack of rewards associated with certain ages and developmental stages. It is obvious, however, that connection between age and depression is something that requires further research.

Given the sociodemographic results as a whole, it may be concluded that Ss in certain social situations (e.g., being unmarried or being a low income) could be seen as having particularly undesirable experiences over which they have no control. Clearly, our results show that a married, rich, and a senior university student in Saudi Arabia is in a more advantageous social position as compared to another colleague who is still single, less rich, and a beginning student.

The relationship between depression and sociodemographic variables can be understood in light of the **learned helplessness theory** outlined in chapter 1 (Seligman, 1975). When dogs were given repeated and random shocks from which they could not escape, they developed depression-like symptoms including depression somatized forms and lost their ability to help themselves. Helpless dogs became submissive, lost weight and appetite, and became sexually deficient. Repeated exposure to experiences over which they have no control (and over which they expect control) has the same implication in human experiences. People from less

advantageous social groups can be seen as particularly likely to be exposed to experiences over which they have little or no control, and become, therefore, more depressed.

Another way to look at these results may be from Lewinsohn's theory about the etiology of depression (Lewinsohn, 1984). He believed that **changes in environmental reinforcements** create then maintain depressive behavior. As with Freud's theory (chapter 1), Lewinsohn's can best be understood by postulating an initial loss. As a result of the loss, the individual loses a source of reinforcement from the environment. This will eventually cause a drop in the individual's activity level, which, in turn, will mean less access to other potential reinforcers and a resultant mood of helplessness and depression. Clearly, relating to certain disadvantageous sociodemographic groups can be seen, in light of the same line of thinking, as a negative social position that leads to losses of reinforcement, and/or to lesser access to other potential reinforcers in life. Kessler, Price & Wortman (1985) correctly noted that people who are exposed to events that are undesirable and uncontrollable may draw inferences about themselves or the world that impairs subsequent coping responses.

This line of thinking about depression and ecology has been reported in statistical terms by an overwhelming number

of researchers whose field studies in the last decades have shown a distinct relationship between social demography and mental illness, as we have explained elsewhere (chapter 2). Relevant here are the studies about social class (which is usually seen as a combination of income and education) and mental illness. Two major lines of thinking can be identified in an inquiry to explain the association between social class and psychopathology. The **first** is the social causation hypothesis that holds that social stress created by lower and disadvantaged social affiliations produces higher rates of psychopathology. The **second** view is based on the social selection theory and hypothesis that disturbed and depressed individuals drift down the social scale due to their psychopathology. The theory of social selection though irrelevant here does not preclude the social causation hypothesis.

Implications and Limitations of the Study

Our results show that being in control (less depressed) is intricately tied to being affiliated with certain social and demographic groups. Although we cannot draw from that a cause-and-effect relationship, it is obvious that social stresses, and lack of social reinforcements created by being a member of a certain social group do positively associate with learned helplessness. But the other psychological views cannot be

totally precluded and that implies that the feeling of being in control acts as a shield against social stress-provoking situations. Obviously, further and more empirical research in more varied groups in different cultures is needed to identify what exactly causes what, and under what conditions.

In addition, although the author recognizes that the study of depression structure and socioenvironmental variables is highly complex and intricate, she believes that such an approach can differentiate subgroupings of people in relation to their experience of depression.

Current psychological and psychiatric research often focuses on individualistic or physiological variables and ignores the study of intraindividual characteristics. Therefore, the author believes, as a future goal, that inclusion of specific personality characteristics along with analysis of the socioenvironmental settings could increase our knowledge of depression cross-culturally.

Further analyses of the various specific areas included in the overall concept of depression (powerlessness, negative self-perception, somatization, etc.) may provide greater knowledge about the social processes which relate to each of these specific areas. More studies are needed of depression among more varied samples, including different ages, education, and pathology.

The current research suggests that depression is a complex concept requiring complex and comprehensive methods of scientific inquiry in order to bring us closer to an understanding of its mechanisms.

The findings of this study should be seen as a reflection of the particular characteristics of the sample of Saudi college students used in this research. A more controlled study to compare students in the West with Arab students in Arab countries would allow more valid inferences as to the effects of culture on patterns of depression as tapped by the Depressive Symptomatology Questionnaire. Although we tried to do this by depending on studies done by other researchers in the U.S., we still believe that more controlled of the cultural variables by using control cultural groups would have been very beneficial.

Although we cited some research and carried out some others to identify the reliability and validity of the current materials used in this study, we still feel the need of a more specific examination of these two properties. Items included in the indices will need further analysis to determine if such depression items really measure depression. Detailed statistical item-by-item analysis of each scale would help to validate each against behavioral criteria.

To further validate the results of this study, it would also have been preferable to include structured interviews in

addition to the research material used in the present study. It will be useful in future research to refine the measurements of depression by including interviewer observations in the analysis of the data.

From the practical point of view, our results can be very useful in improving and promoting mental health services in Saudi Arabia. Obviously, psychological services are necessary in light of the high percentages of distress common in this society, as our study proves. In spite of the belief that the student group is usually healthier, we find that even among this group the need for mental health services is mandated.

In light of the fact that psychopathological trends can be somatized, our results may provide evidence to assist individuals in other medical nonpsychiatric settings by establishing screening programs to identify and accordingly to serve somatized cases of depression and psychopathology.

This research also tells us that programs for mental health services should be tailored according to the needs encountered in certain sociodemographic groups. It tells us that many disadvantaged groups may be more vulnerable to mental health problems than others, this requires more preparedness from the governments in the Middle Eastern cultures to meet the mental health needs of such groups, especially in this time of accelerated social change.

These findings are expected to apply not only to the population studied in Saudi Arabia, but to other groups in other parts of the Arab world. Therefore, our findings should be taken as a first step toward opening doors in Arab health and educational settings to psychological services. The findings of this study not only stand as a theoretical contribution, but they may help also in giving the additional information needed if we are to deal with treatment of depression.

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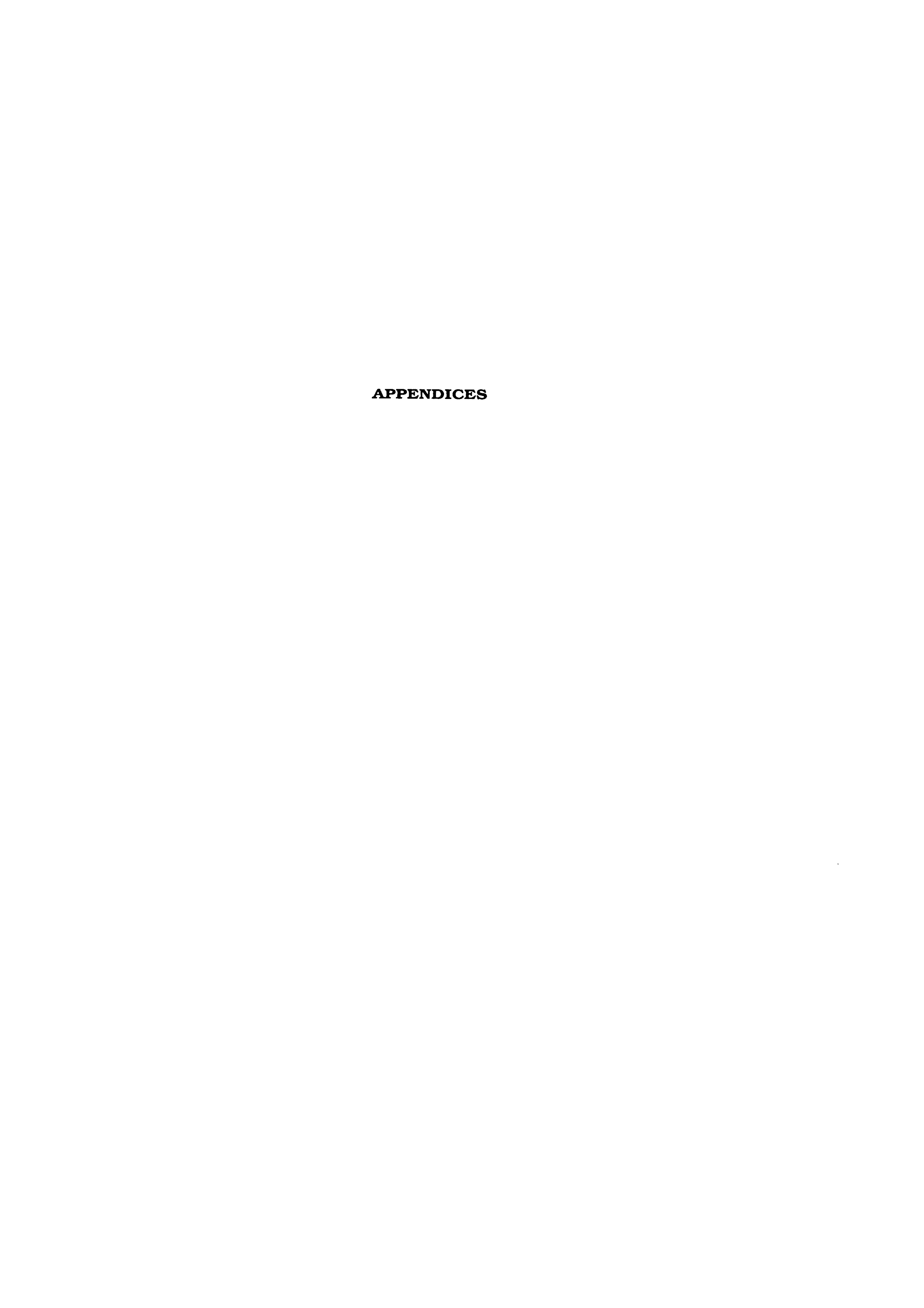
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APPENDICES

APPENDIX A

INSTRUCTIONS AND CONSENT FOR COLLABORATION

This booklet consists of some questions about some social and personal information. It is part of a research project that aims to study attitudes toward certain mental health issues. Although this research is of a scientific nature and may provide us with useful information, it may offer no direct benefit for you. Although your participation is appreciated, it is voluntary, and of course you have the choice of refusing to participate. Also, you may withdraw at any time without creating harmful consequences to you. You have the option as well, to drop out at any time you wish from the research. Any information you give will, of course, be very confidential, and to assure you of the confidentiality, you do not have to write your name or any identifiable information in the booklet. Since all information given by you will be confidential, please try to give as accurate information as possible.

Thank you for your cooperation.

THE CONSENT FOR COLLABORATION

This is to consent that I have read the instructions of this research, and agree to participate in answering the questionnaires identified by the researcher. I understand that my participation is voluntary, and I have the choice of refusing to participate. Also, I may withdraw at any time without creating harmful consequences to me. I have the option as well, to drop out at any time I wish from this research.

________________________ ________________________

Name Signature

استـــــــتبيان عام

تتضمن هذه الكراسة مجموعات متنوعة من الاسئلة التى تهدف الى تحديد اتجاهات الناس نحو بعض الموضوعات الاجتماعية والعامة ،والى معرفة بعـــض المشكلات النفسية او الاجتماعية الشائعة ،هدفها الدراسة العلمية والاعانة علىَ مواجهة هذه المشكلات والتخطيط لعلاجها .

ونظرا لان كل اجاباتك ستعامل بكل سرية ، فاننا نرجو منك التعاون فى اعطاء اجابات صحيحة وان لا تترك بقدر الامكان اى سؤال دونَ اجابة .

ولا تحتاج بالطبع لكتابة اسمك الا اذا اردت ذلك ، ومالم يكن لديك مانع من متابعة اجاباتك فيما بعد وتيسير الاستفسار منك عن بعض الامور الاضافية .

APPENDIX B

THE BIOGRAPHLCAL QUESTIONNAIRE

The Biographical Questionnaire consists of some items about major demographic, and biographic aspects, including:

1. Date of birth: 2. Age:
3. Sex: Male Female
4. Marital status: Married Single Divorced Widow
5. Educational level (Indicate number of years of school):
6. Profession or career:
7. Citizenship and nationality:
8. Residence:
9. Were you raised in a: village small town city?
10. Number of years spent in original residence:
11. When did you move to here?
12. Father's educational level:
13. Mother's educational level:
14. Do you have a personal monthly income?
    Please indicate your monthly income:
15. Does your father have a monthly income?
    Please indicate your father's monthly income:
16. Does your mother have a monthly income?
    Please indicate your mother's monthly income:

17. Father's occupation:
18. Mother's occupation:
19. Do you own a personal car?
20. Does your family have a private driver?
21. Do you have maids serving in your house?
22. (If yes: how many? ......)

والان نرجو اولا أن تجب عن هذه المجموعة من الاسئلة العامة قبل أن تنتقل لغيرها من الاسئلة .

أ – معلومات عامة عنك

٠١ تاريخ الميلاد ٠٢ العمر
٠٣ الجنس ذكر انثى
٠٤ الوضع الاجتماعي : متزوج أعزب مطلق (مطلقة) أرمل (أرملة)
٠٥ المستوى التعليمي : أمي ابتدائي متوسط ثانوي جامعي
٠٦ المهنة :
٠٧ الجنسية :
٠٨ الموطن (يقصد بالموطن البلد الذي نشأت فيه مع اسرتك) :
٠٩ هل نشأت في : قرية مدينة صغيرة . مدينة ضخمة
اذكر اين نشأت ( )
٠١٠ السنوات التي قضيتها في مكان النشأة الاولى :
٠١١ متى انتقلت الى هنا (اذكر السنة)
٠١٢ هل والدك : امي يعرف القراءة والكتابة
أتم المرحلة : الابتدائية المتوسطة الثانوية الجامعة
٠١٣ اذكر سنوات التعليم بالنسبة للوالدة (في حدود علمك)

٠١٤ هل لك دخل شهري مستقل : نعم لا
ما هودخلك الشهري بالتقريب .

٠١٥ هل لوالدك دخلا شهريا مستقلا : نعم لا
ما هو الدخل الشهري للوالد بالتقريب :

٠١٦ هل لوالدتك دخل شهري مستقل :
ما هو الدخل الشهري للوالدة بالتقريب :

٠١٧ هي تملك سيارة خاصة : نعم لا
٠١٨ هل تملك اسرتك منزلا مستقلا : نعم لا
٠١٩ مهنة الوالد (ان وجدت) :
٠٢٠ مهنة الوالدة (ان وجدت)
٠٢١ هل لديكم (في منزل الاسرة) : خادم طباخ سائق سياره
٠٢٢ هل لك حجرة مستقلة في منزلكم ؟ نعم لا

APPENDIX C

THE DEPRESSION SYMPTOMATOLOGY SCALE AND THE GENERAL PSYCHOPATHOLOGY SYMPTOMS SCALES

The 18 depression items are as follows:

1. Do you feel in good spirits?
2. How often do you have crying spells or feel like it?
3. How often do you feel you don't enjoy doing things any more?
4. How often do you feel alone and helpless?
5. How often do you feel that people don't care what happens to you?
6. How often do you feel that life is hopeless?
7. Do you tend to feel tired in the mornings?
8. Do you feel that you are bothered by all sorts of ailments in different parts of your body?
9. Have you ever had periods of days or weeks when you couldn't take care of things because you couldn't get going?
10. Do you have any trouble getting to sleep and staying asleep?
11. How often do you have trouble with sleeping?
12. How often do you think about suicide?
13. Do you think that life has changed so much in our

modern world that people are powerless to control their own lives?

14. When things don't turn out, how often would you say you blame yourself?
15. Do you ever have loss of appetite?
16. Do you sometimes wonder if anything is worthwhile any more?
17. How often would you say that things don't turn out the way you want them to?
18. How does the future look to you?

The General Psychopathological Symptoms Scale consists of the following items:

19. My feelings are easily hurt.
20. I find difficulty in concentration on one subject.
21. I hear strange and unusual voices.
22. I feel my mind is disturbed.
23. At times I have fits of laughing and crying that cannot control.
24. I am a shy person.
25. I am worried about getting a nervous breakdown.
26. I frequently suffer from problems that require psychotherapy or professional help.
27. Peculiar and strange thoughts control my thinking.

28. I feel uneasy with others.
29. I have frequent problems with constipation.
30. My sleeping is easily disturbed by noise.
31. I do not breath smoothly.
32. I suffer from heart palpitations.
33. I have difficulty in expressing my thoughts in front of others to the degree that I stutter or stammer.
34. I am made nervous by certain animals.
35. I take sleeping drugs or tranquilizers.
36. I frequently get involved in my personal thoughts so that I cannot concentrate on what others tell me.
37. I do not care if I see a person or an animal suffering because of pain.
38. My hands frequently shake when I am strained.
39. I see things or animals or people around me that others do not see.
40. I find myself frequently quarreling with people.
41. Do you suffer because of frequent accidents or mishaps?
42. Do you find yourself doing certain things several times over to make sure that you have done them the correct way?
43. Do you feel sometimes that you have multiple personalities?

44. There is something wrong with my mind.
45. I have difficulty in paying attention when I am with people.
46. I have more problems than most others in my work (or school).
47. People talk badly about me when I am not present.

استبيان بعض المشكلات

فيما يلى مجموعة من الاسئلة عن بعض المشكلات التى قد تصيب بعض الناس ، المرجو أن تقرأ كل سؤال وان تجيب عنها بوضع علامة (✓) أمام فئة الاستجابة التى تصف حالتك أمام كل سؤال

السؤال	نعم دائما	غالبا	لا أو نادرا
١. عادة ما أشعر انى فى حالة طيبة	...	...	...
٢. يصيبنى صداع حاد	...	...	...
٣. أشعر بعدم المتعة فى الاعمال التى أقوم بها.	...	...	...
٤. أشعر بانى وحيد وعاجز..................	...	...	...
٥. الناس لا تهتم بما يحدث لى	...	...	...
٦. اشعر أنه لا أمل فى الحياة..............	...	...	...
٧. أشعر بالتعب والارهاق فى الصباح	...	...	...
٨. أشعر بالالم فى كثير من أعضاء جسمى.........	...	...	...
٩. تمر على فترات كثيرة أشعر فيها بالعجز عن الاهتمام بكثير من امورى الشخصية لاننى لم استطع مواصلة نشاطى	...	...	...
١٠. أواجه صعوبة واضطرابا فى النوم	...	...	...
١١. نومى متقطع	...	...	...
١٢. افكر فى الانتحار........................	...	...	...
١٣. تغيرت الحياة لدرجة اصبح الناس عاجزين عن تسيير امور حياتهم اليومية	...	...	...
١٤. ألوم نفسى بشدة عندما تسير الامور على غير ما اشتهى	...	...	...
١٥. شهيتى للطعام غير جيدة	...	...	...
١٦. اشعر أن كثيرا من الاشياء لم يعد لها قيمة فى الحياة	...	...	...
١٧. تسير الامور أحيانا على غير ما أشتهى ...	...	...	...
١٨. أعتقد أن المستقبل أمامى مظلم	...	...	...
١٩. تجرح مشاعرى بسهولة لدرجة البكاء	...	...	...
٢٠. أعجز عن تركيز فكرى فى موضوع واحد . ..	...	...	...
٢١. أسمع أصواتا غريبة غير عادية	...	...	...
٢٢. أشعر أن عقلى مختل	...	...	...
٢٣. تصيبنى نوبات من الضحك والبكاء لا استطيع مقاومتها	...	...	...
٢٤. أميل للخجل	...	...	...

السؤال	نعم دائما	غالبا	لا أو نادرا
٢٥. يصيبنى الخوف من الانهيار العصبى	...	...	...
٢٦. تصادفنى مشكلات تحتاج للعلاج النفسى	...	...	...
٢٧. تسيطر على أفكار غريبة غير عادية........	...	...	...
٢٨. أخاف من مواجهة المجتمعات	..	...	...
٢٩. اصاب بالامساك	...	...	...
٣٠. توقظنى الاصوات من نومى بسهولة	...	...	...
٣١. اعانى من صعوبات فى التنفس	...	...	...
٣٢. تصدر من قلبى دقات غير منتظمة	...	...	...
٣٣. أجد صعوبة فى التعبير عن نفسى أمام الاخرين بسبب اللجلجة	...	...	...
٣٤. أخاف من بعض الحيوانات	...	...	...
٣٥. اتعاطى بعض الادوية المهدئة أو المنومة	...	...	...
٣٦. أغرق كثيرا فى التفكير ،لدرجة لا تجعلنى اتابع ما يقوله الاخرون	...	...	...
٣٧. لا أتألم لمشهد انسان أو حيوان يتألم	...	...	...
٣٨. يدى ترتجف عندما أنفعل واتضايق	...	...	...
٣٩. اشاهد من حولى انسانا أو حيوانا لايراها الاخرون	...	...	...
٤٠. أدخل فى مشاجرات كثيرة مع الناس	...	...	...
٤١. هل أنت كثير الوقوع فى الحوادث	...	...	...
٤٢. كثيرا ما اكرر الشىء مرات ومرات لمجرد ان اتأكد من أننى قد فعلته	...	...	...
٤٣. أحس أحيانا أن لى شخصيات متعددة	...	...	...
٤٤. تفكيرى مضطرب	...	...	...
٤٥. كثيرا ما أجد نفسى غير منتبه لما يقوله الاخرون	...	...	...
٤٦. اعانى من مشكلات فى الدراسة (او العمل)			
٤٧. يتحدث الناس عنى فى غيبتى بالسوء	...	...	...

APPENDIX D

MULTIPLE AFFECT ADJECTIVE CHECK LIST

MULTIPLE AFFECT ADJECTIVE CHECK LIST

TODAY FORM

By Marvin Zuckerman
and
Bernard Lubin

DIRECTIONS: On this sheet you will find words which describe different kinds of moods and feelings. Mark an ☒ in the boxes beside the words which describe how you feel now - today. Some of the words may sound alike, but we want you to check all the words that describe your feelings. Work rapidly.

قائمة تحليل الصفات والمشاعر

فيما يلى مجموعة من الكلمات التى تصف عددا متنوعا من المشاعر والحالات النفسية . رجاء وضع علامة (X) امام كل عبارة ترى أنها تصف شعورك الآن . قد تتشابه بعض الكلمات .. لكن المطلوب هو أن تضع علامة (X) على كل صفة تنطبق عليك .

Name (Optional.).. الإسم (اختيارى)

1- Date of Birth.. تاريخ الميلاد ١-

2- Sex ☐Male ☐Female ☐أنثى ☐ذكر الجنس ٢-

3- Social condition : الوضع الإجتماعى: ٣-

☐أرمل (أرملة) ☐مطلق (مطلقة) ☐أعزب ☐متزوج

☐Widow ☐Divorced ☐Single ☐Married

4- Educational Level : المستوى التعليمى: ٤-

☐جامعى ☐ثانوى ☐متوسط ☐ابتدائى ☐أمى

☐Higher education ☐High School ☐Intermediate ☐Elementry ☐Ignorant

5- Business .... المهنة ٥-

6- Nationality .... الجنسية ٦-

٧- الموطن (يقصد بالموطن البلد الذى نشأت فيه مع أسرتك) ....

7- Home (one's native place) ....

٨- متى انتقلت الى هنا (أذكر السنة) ....

8- When you transferred to here (mention the year)......................................

English	Arabic
1- active	١- نشط
2- adventurous	٢- مغامر
3- affectionate	٣- عاطفي
4- afraid	٤- خائف
5- agitated	٥- مستثار
6- agreeable	٦- مقبول
7- aggressive	٧- عدواني
8- alive	٨- مملوء حيوية
9- alone	٩- وحيد
10- amiable	١٠- لطيف
11- amused	١١- مبسوط
12- angry	١٢- غضبان
13- annoyed	١٣- منزعج
14- awful	١٤- فظيع
15- bashful	١٥- متردد
16- bitter	١٦- لاذع
17- Blue	١٧- باهت الشخصية
18- bored	١٨- ملول
19- calm	١٩- هاديء
20- cautious	٢٠- حذر
21- cheerful	٢١- مبتهج
22- clean	٢٢- نقي
23- complaining	٢٣- كثير الشكوى
24- contented	٢٤- معارض
25- contrary	٢٥- راضي
26- cool	٢٦- بارد
27- cooperative	٢٧- متعاون
28- critical	٢٨- كثير النقد
29- cross	٢٩- معاكس
30- cruel	٣٠- قاسي
31- daring	٣١- جسور
32- desperate	٣٢- يائس
33- destroyed	٣٣- محطم
34- devoted	٣٤- مخلص
35- disagreeable	٣٥- غير مقبول
36- discontented	٣٦- ساخط
37- discourage	٣٧- مثبّط
38- disgusted	٣٨- مشمئز
39- displeased	٣٩- مستاء
40- energetic	٤٠- مملوء طاقة
41- enraged	٤١- حانق
42- enthusiastic	٤٢- متحمس
43- fearful	٤٣- خائف
44- fine	٤٤- حسن
45- fit	٤٥- كفء
46- forlorn	٤٦- يائس
47- frank	٤٧- صريح
48- free	٤٨- حر
49- friendly	٤٩- ودي ، ودود
50- frightened	٥٠- خائف
51- furious	٥١- عاصف
52- gay	٥٢- باحث عن المتعة
53- gentle	٥٣- لطيف
54- glad	٥٤- مسرور
55- gloomy	٥٥- مغموم
56- good	٥٦- جيد
57- good-natured	٥٧- ودي - بهيج
58- grim	٥٨- شرس
59- happy	٥٩- سعيد
60- healty	٦٠- معافى
61- hopeless	٦١- لا أمل له
62- hostile	٦٢- عدائي
63- impatient	٦٣- نافذ الصبر
64- incensed	٦٤- مكرم - مقدر
65- indignant	٦٥- ساخط
66- inspired	٦٦- ملهم
67- interested	٦٧- مهتم
68- irritated	٦٨- مثار
69- jealous	٦٩- غيور
70- joyful	٧٠- فرحان
71- kindly	٧١- رفيق
72- lonely	٧٢- معزول
73- lost	٧٣- ضائع
74- loving	٧٤- محب
75- low	٧٥- ضئيل
76- lucky	٧٦- محظوظ
77- mad	٧٧- مجنون
78- mean	٧٨- خبيث
79- meek	٧٩- حليم
80- merry	٨٠- منشرح
81- mild	٨١- معتدل
82- miserable	٨٢- بائس
83- nervous	٨٣- عصبي
84- obliging	٨٤- ملتزم
85- offended	٨٥- منتهك
86- outraged	٨٦- مهان
87- panicky	٨٧- مذعور
88- patient	٨٨- صبور
89- peaceful	٨٩- مسالم
90- pleased	٩٠- مسرور
91- pleasant	٩١- مؤدب
92- polite	٩٢- سار
93- powerful	٩٣- قوي
94- quiet	٩٤- وديع
95- reckless	٩٥- مهمل
96- rejected	٩٦- مرفوض
97- rough	٩٧- خشن
98- sad	٩٨- حزين
99- safe	٩٩- معافى
100- satisfied	١٠٠- قانع
101- secure	١٠١- مطمئن
102- shaky	١٠٢- مهزوز
103- shy	١٠٣- خجول
104- soothed	١٠٤- منعم
105- steady	١٠٥- ثابت، مستقر
106- stubborn	١٠٦- عنيد
107- stormy	١٠٧- عنيف
108- strong	١٠٨- قوي
109- suffering	١٠٩- متوجع
110- sullen	١١٠- كئيب
111- sunk	١١١- مهزوم
112- sympathetic	١١٢- متعاطف
113- tame	١١٣- ألوف (أليف)
114- tender	١١٤- حساس
115- tense	١١٥- مشدود الأعصاب - متوتر
116- terrible	١١٦- مخيف
117- terrified	١١٧- خائف
118- thoughtful	١١٨- مهتم بالآخرين
119- timid	١١٩- خاضع
120- tormented	١٢٠- معذب
121- understanding	١٢١- متفهم
122- unhappy	١٢٢- غير سعيد
123- unsociable	١٢٣- غير اجتماعي
124- upset	١٢٤- مضطرب
125- vexed	١٢٥- مغاظ
126- warm	١٢٦- دافيء
127- whole	١٢٧- بصحة جيدة
128- wild	١٢٨- متوحش
129- willful	١٢٩- مصمم
130- wilted	١٣٠- مقموع - مذبل
131- worrying	١٣١- مشغول
132- young	١٣٢- شاب (يافع)

APPENDIX E

CORRELATIONS MATRIX BETWEEN DEPRESSION VARIABLES AND SOCIODEMOGRAPHIC VARIABLES

Corelation Matrix
Sample Size: 243

File: /dpc/sampledata/thesis

CORRELATIONS

	DEP	AGE	MAR	CITZ	NAT	INCOM	INCOF	F.ED.	INCM	M.ED.	sprts	cryng	nojoy	alone	nocar	hopls	tird	almnt	going	trslp	sleep	suicd	life	blame	aptit	worth	thing	futre
DEP	.9999																											
AGE	-.0789	.9999																										
MAR	.0511	-.0260	.9999																									
CITZ	-.0379	-.0596	-.2983	.9999																								
NAT	.0543	.0429	-.0671	-.0173	.9999																							
INCOM	-.0911	.1274	-.0537	.0097	-.0564	.9999																						
INCOF	9.911	.1144	.0066	-.1175	-.0715	.1374	.9999																					
F.ED.	-.1497	.0522	.0157	.2185	-.0572	.0514	.1835	.9999																				
INCM	.0511	.0725	.0194	.0006	-.0114	-.0167	.0535	.0266	.9999																			
M.ED.	-.0429	.0872	.0347	.1823	-.1787	.0284	.0345	.3739	.1742	.9999																		
sprts	.2781	-.0290	-.0956	.0673	.0122	-.0557	-.0944	-.0648	-.1758	-.0980	.9999																	
cryng	.5808	-.0838	.0725	-.0639	.1099	-.0552	-.0048	-.1118	.0916	-.1088	.1516	.9999																
nojoy	.5405	-.0161	.0161	.0458	-.0310	-.0598	.0787	-.0164	.1473	-.0082	.0034	.3310	.9999															
alone	.5908	-.0429	-.0240	.0424	-.0093	-.0822	.1336	-.1937	-.0016	-.0690	.1415	.2879	.4063	.9999														
nocar	.5487	-.0463	.0038	-.0680	.1003	-.1369	.0741	-.1533	.0373	-.0378	.0093	.3339	.2403	.4566	.9999													
hopls	.5025	.0219	.0202	-.0046	.0506	-.0960	.0364	-.1223	.0565	-.0486	.1655	.3413	.3066	.4071	.3378	.9999												
tird	.5765	-.0245	-.0024	-.0764	-.0499	.0435	-.0231	-.0294	.0778	.0827	.0927	.2416	.2525	.2140	.1779	.2867	.9999											
almnt	.5805	-.1143	-.0029	-.0156	-.0227	-.1285	-.1079	-.0326	.2072	-.0045	.1360	.3094	.3173	.2591	.3013	.2259	.4768	.9999										
going	.6123	.0023	.0077	-.0051	-.1056	-.0965	-.0271	-.0379	.0473	.0180	.1925	.2564	.3422	.3153	.2497	.2484	.3931	.2880	.9999									
trslp	.6287	-.0219	.0544	.0278	.0432	-.0383	-.0112	-.1062	-.0550	-.0120	.1509	.2733	.2509	.3688	.2407	.2413	.3634	.3029	.3419	.9999								
sleep	.5912	-.0431	.0666	.0342	.0732	-.0101	-.0796	-.1339	-.0981	-.0490	.1290	.2023	.2357	.3004	.2542	.1869	.3981	.2857	.2556	.6835	.9999							
suicd	.4635	-0.031	-.0162	-.0510	.0080	-.0938	.0287	-.0475	-.0248	-.0347	.1894	.3250	.2264	.2965	.1195	.2561	.2421	.1516	.2620	.3036	.2462	.9999						
life	.5473	-.0278	.0489	-.0716	.1023	-.0225	.0487	-.0189	.0025	-.0119	.0978	.2593	.1971	.1471	.2156	.1290	.3249	.2596	.4070	.2167	.2492	.2111	.9999					
blame	.4770	-.0505	.0841	-.0354	.0469	.0078	-.0014	-.1035	-.0019	-.0176	.0777	.1702	.1466	.1472	.2873	.0966	.1460	.2097	.2472	.2656	.1900	.1092	.2343	.9999				
aptit	.5810	-.1354	.0474	-.0603	-.0160	-.1080	.0591	-.0884	-.0013	-.0517	.1157	.2460	.2199	.3348	.3317	.2632	.2505	.3046	.3050	.3493	.3573	.2452	.2392	.2852	.9999			
worth	.6394	-.0488	.0663	-.0827	.0690	.0200	.0627	-.1167	.0839	-.0660	.0173	.3618	.3318	.2989	.3267	.1847	.2559	.2824	.3338	.2560	.2482	.2235	.5489	.3764	.3797	.9999		
thing	.5830	-.0451	.0500	-.0609	.1424	.0563	-.0484	-.0659	.0506	.0415	.0726	.3239	.2577	.2406	.2778	.1976	.2581	.3104	.3056	.2307	.2490	.2015	.3478	.3916	.2782	.4253	.9999	
futre	.5804	-.0405	.0495	.0318	-.0332	-.1315	-.0167	-.0397	.0405	.0330	.2170	.3680	.3243	.3907	.2263	.3713	.3298	.3088	.3484	.3380	.3082	.3422	.1926	.0967	.2076	.3000	.2743	.9999